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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,493	12/30/2003	Steve Larsen	S63.2-10827-US01	8743

490 7590 09/29/2005

VIDAS, ARRETT & STEINKRAUS, P.A.
6109 BLUE CIRCLE DRIVE
SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER	
BIRENBAUM, NIRA S	
ART UNIT	**PAPER NUMBER**
1742	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/748,493	LARSEN ET AL.	
	Examiner	Art Unit	
	Nira S. Birenbaum, Ph.D.	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-63* is/are pending in the application.

4a) Of the above claim(s) *1-58* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *59-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-63* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5-6-04, 7-21-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-35, drawn to a stent, classified in class 420, subclass 468.

II. Claims 36-58, drawn to a method, classified in class 205, subclass 684.

III. Claims 59-63, drawn to a method, classified in class 205, subclass 658.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make a stent having a different alloy composition than claimed in claim 1.

Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make a stent having a different alloy composition than claimed in claim 1.

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed

does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination of claim 59 does not require a chelating agent having at least one sulfur atom as claimed in claim 36. The subcombination has separate utility such as electropolishing a stent by means other than laser cutting, such as photolithography.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Lisa Ryan-Lindquist on September 21, 2005 a provisional election was made without traverse to prosecute the invention of group III, claims 59-63. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-58 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 59 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andreacchi (US Patent No. 6,679,980) in view of Chen *et al.* (US 2002/0130049).

Andreacchi teaches a method for electropolishing a stent comprising:

- providing a tubular member and laser cutting a stent pattern in it (column 6, lines 11-13);
- electropolishing the stent in an acidic electrolyte (column 7 lines 47-65).

However, this reference does not teach subjecting the bath to a multiple pulse waveform and using an electrolyte containing a chelating agent.

Chen *et al.* teach a method for electropolishing a substrate in an acidic electrolyte which also contains a chelating agent (paragraphs 125 and 134). The electrolyte is subjected to a multiple pulsed waveform (paragraph 143).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Andreacchi by using a pulsed waveform and incorporating a chelating agent in the electrolyte as taught by Chen *et al.*, because Chen *et al.* teach that a pulse plating technique allows for both electrodeposition and erosion of the substrate (paragraph 144), and that chelating agents are useful additives in electropolishing baths (paragraph 134).

Regarding claim 63, Chen *et al.* teach that the pulse plating technique comprises a periodic reverse multiple pulse waveform (paragraph 143).

Claims 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andreacchi in view of Chen *et al.* as applied to claim 59 above, and further in view of Wallace *et al.* (US 2005/0121390).

Andreacchi and Chen *et al.* teach the features as previously described. However, these references do not teach that the chelating agent has at least one sulfur atom. Wallace *et al.* teach a method for recovery of precious metals wherein thiourea (a sulfur-containing compound) is used as the chelating agent (paragraph 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Andreacchi in view of Chen *et al.* by using thiourea as the chelating agent as disclosed by Wallace *et al.* because Wallace *et al.* teach that thiourea is a good chelating agent for stable metals such as gold (paragraph 4).

Regarding claim 62, the stent would inherently be etched in the acidic bath prior to electropolishing, because the stent would have to be placed in the bath before the current is applied.

Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andreacchi in view of Chen *et al.* as applied to claim 59 above, and further in view of Edson (US Patent No. 4,663,005).

Andreacchi and Chen *et al.* teach the features as previously described. Furthermore, Andreacchi teaches that the stent is soaked in an acidic solution containing nitric acid (column 6, lines 26-45).

However, Andreacchi in view of Chen *et al.* does not teach that the solution also contains fluoroboric acid.

Edson teaches an electropolishing process for metals such as copper, gold and silver which uses fluoboric acid, which is synonymous with fluoroboric acid, in the electrolyte (column 3, lines 44-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Andreacchi in view of Chen *et al.* by incorporating fluoroboric acid in the soaking solution as disclosed by Edson, because Edson teaches this acid activates thiourea (see abstract).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nira S. Birenbaum, Ph.D. whose telephone number is (571) 272-8516. The examiner can normally be reached on M-F 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

nsb

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